

Language Modeling for Information Retrieval. Edited by W. Bruce Croft and John Lafferty. Kluwer Academic Publishers, The Netherlands. (2003). 245 Pages. \$97.00, EUR 99.00, GBP 62.00.

Contents:

1. Probabilistic Relevance Models Based on Document and Query Generation John Lafferty, ChengXiang Zhai
 1.1 Introduction 1.2 Generative Relevance Models 1.3 Discussion 1.4 Historical Notes 2. Relevance Models in Information Retrieval Victor Lavrenko and W. Bruce Croft 2.1 Introduction 2.2 Relevance Models 2.3 Estimating a Relevance Model 2.4 Experimental Results 3.5 Conclusions 3.6 Acknowledgments 3. Language Modeling and Relevance Karen Sparck Jones, Stephen Robertson, Djoerd Hiemstra and Hugo Zaragoza 3.1 Introduction 3.2 Relevance in LM 3.3 A Possible LM Approach: Parsimonious Models 3.4 Concluding Comment 4. Contributions of Language Modeling to the Theory and Practice of IR 4.1 Introduction 4.2 What is Language Modeling in IR 4.3 Simulation Studies of Variance Reduction 4.4 Continued Exploration 5. Language Models for Topic Tracking Wessel Kraaij and Martin Spitters 5.1 Introduction 5.2 Language Models for IR Tasks 5.3 Experiments 5.4 Discussions 5.5 Conclusions 6. A Probabilistic Approach to Term Translation for Cross-Lingual Retrieval Jinxi Xu and Ralph Weischedel 6.1 Introduction 6.2 A Probabilistic Model for CLIR 6.3 Estimating Term Translation Probabilities 6.4 Related Work 6.5 Test Collections 6.6 Comparing CLIR with Monolingual Baseline 6.7 Comparing Probabilistic and Structural Translations 6.8 Comparing Probabilistic Translation and MT 6.9 Measuring CLIR Performance as a Function of Resource Sizes 6.10 Reducing the Translation Cost of Creating a Parallel Corpus 7. Using Compression-Based Language Models for Text Categorization William J. Teahan and David J. Harper 7.1 Background 7.2 Compression Models 7.3 Bayes Classifiers 7.4 PPM-Based Language Models 7.5 Experimental Results 7.6 Discussion 8. Applications of Score Distributions in Information Retrieval R. Manmatha 8.1 Introduction 8.2 Related Work 8.3 Modeling Score Distributions of Search Engines 8.4 Combining Search Engines Indexing the Same Database 8.5 Applications to Filtering and Topic Detection and Tracking 8.6 Combining Search Engines Indexing Different Databases or Different Languages 8.7 Conclusion 8.8 Acknowledgements 9. An Unbiased Generative Model for Setting Dissemination Thresholds Yi Zhang and Jamie Callan 9.1 Introduction 9.2 Generative Models of Dissemination Thresholds 9.3 The Non-Random Sampling Problem & Solution 9.4 Experimental Methodology 9.5 Experimental Results 9.6 Conclusion 10. Language Modeling Experiments in Non-Extractive Summarization Vibhu O. Mitta and Micheal J. Witbrock 10.1 Introduction 10.2 Related Work 10.3 Statistical Models of Gisting 10.4 Training the Models 10.5 Output and Evaluation 10.6 Conclusion Index.

The Wired Homestead: An MIT Press Sourcebook on the Internet and the Family. Edited by Joseph Turow and Andrea L. Kavanaugh. The MIT Press, Cambridge, MA (2003). 502 Pages. \$39.95

Contents

Introduction Joseph Turow and Andrea L. Kavanaugh I. The New World in Context 1 Family Boundaries, Commercialism, and the Internet: A Framework for Research Joseph Turow 2. Disintermediating the Parents: What Else Is New? Elihu Katz 3. Historical Trends in Research on Children and the Media: 1900-1960 Ellen Wartella and Byron Reeves 4. The Impact on the Internet on Children: Lessons from Television Daniel R. Anderson and Marie K. Evans 5. Television and the Internet Ellen Seiter II. On Parents and Kids 6. Data on Family and the Internet: What Do We Know and How Do We Know It: Maria Papadakis 7. A Family Systems Approach to Examining the Role of the Internet in the Home Amy B. Jordan 8. The Internet and the Family: The Views of Parents and Youngsters Joseph Turow and Lilach Nir 9. Mediated Childhoods: A Comparative Approach to Young People's Changing Media Environment in Europe Sonia Livingstone 10. Outlook and Insight: Young Danes' Uses of the Internet - Navigating Global Seas and Local Waters Gitte Stald 11. Sex on the Internet: Issues, Concerns and Implications Mark Griffiths III. The Wired Homestead and Online Life 12. The Internet's Implications for Home Architecture Steven Izenour 13. Breaking Up Is Hard to DO: Family Perspectives on the Future of the Home PC David Frolich, Susan Dray, and Amy Silverman 14. Women, Guilt, and Home Computers Catherine Burke 15. "Nobody Lives Only in Cyberspace": Gendered Subjectivities and Domestic Use of the Internet Lisa-Jane McGerty 16. Internet Paradox Revisited Robert Kraut, Sara Kiesler, Bonka Boneva, Jonathon Cummings, Vicki Helgeson, and Anne Crawford 17. Virtuality and Its Discontents Sherry Turkle IV. The Wired Homestead and Civic Life 18. Three for Society: Households and Media in the Creation of Twenty-First Century Communities Jorge Reina Schement 19. When Everyone's Wired: Use of the Internet in Networked Communities Andrea L. Kavanaugh 20. Community Building on the Web Lodi Rhodes 21. Examining Community in the Digital Neighborhood: Early Results from Canada's Wired Suburb Keith Hampton and Barry Wellman Contributors. Name Index. Subject Index.

Probability and Statistics for Computer Science. By James L. Johnson. Wiley- Interscience, Hoboken, NJ. 760 Pages. \$98.00.

Contents:

Preface. 1. Combinatorics and Probability 1.1 Combinatorics 1.1.1 Sampling without replacement 1.1.2 Sampling with replacement 1.2 Summations 1.3 Probability spaces and random variables 1.4 Conditional probability 1.5 Joint distributions 1.6 Summary 2. Discrete Distributions 2.1 The Bernoulli and binomial distributions 2.2 Power series 2.3 Geometric and negative binomial forms 2.4 The Poisson distribution 2.5 The hypergeometric distribution 2.6 Summary 3. Simulation 3.1 Random number generation 3.2 Inverse transforms and rejection filters 3.3 Client-server systems 3.4 Markov chains 3.4.1 Irreducible periodic Markov chains 3.4.2 Convergence properties 3.5 Summary 4. Discrete Decision Theory 4.1 Decision methods without samples 4.2 Statistics and their properties 4.3 Sufficient statistics 4.4 Hypothesis testing 4.4.1 Simple hypothesis versus simple alternative 4.4.2 Composite hypothesis